MTS-3201US

Application No.:

09/612,797

Amendment Dated:

May 3, 2005

Reply to Office Action of:

February 25, 2005

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

## Listing of Claims:

- 1-7. (Cancelled).
- 8. (Previously Presented) A method for recording a sequence of multivalued data on a recording medium, comprising the steps of:
- (a) receiving the sequence of multivalued data for consecutive recording on a single track of the recording medium;
- (b) representing the sequence received in step (a) by a sequence of power levels;
- (c) grouping the sequence of power levels in step (b) into groups, with each group having first, second and third consecutive power levels from the sequence of power levels;
- (d) averaging the first and third power levels to obtain an averaged power level;
- (e) modifying the second power level in each group by a derived value dependent on the averaged power level; and
- (f) recording on the single track the sequence of power levels of step (b) after being modified by step (e).
- 9. (Previously Presented) The method of claim 8 wherein step (e) includes the steps of:

differencing the averaged power level and the second power level to obtain a difference; and

MTS-3201US

Application No.:

09/612,797

Amendment Dated:

May 3, 2005

Reply to Office Action of:

February 25, 2005

multiplying the difference by a predetermined factor to obtain the derived value.

- (Currently Amended) A method of reducing inter-symbol interference 10. on multivalued data in a read process by adjusting the power of a write pulse in a multivalue write process, comprising the steps of:
- storing temporarily multivalued data sequentially, wherein the (a) multivalued data is a sequence of data for consecutive recording on a single track of a recording medium;
  - assigning a write laser power respectively to each multivalue; (b)
- modifying the write laser powers sequentially using multivalues of a (c) preceding mark value and a following mark value; and
- recording sequentially on athe single track the modified write laser (d) powers.
- (Previously Presented) The method of claim 10, wherein step (c) 11. includes determining a modification quantity by an average value of the preceding mark value and the following mark value to be stored.
  - (Cancelled) 12.